



ANNUAL REPORT 1995

*A
New
Vision*

TENNESSEE VALLEY AUTHORITY

THE TVA VISION

*To be the recognized world leader
in providing energy and
related services,
independently and in alliance
with others,
for society's global needs.*

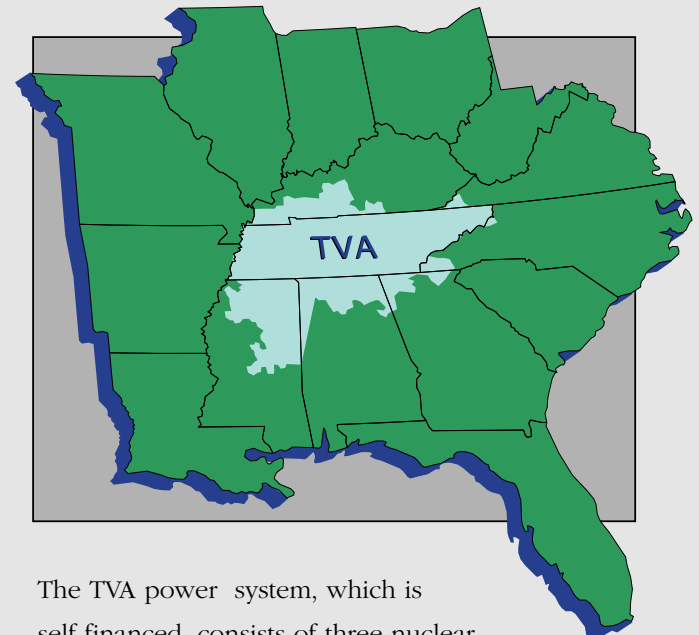
TVA GOALS

*Customer Driven
Employee Sensitive
Environmentally Responsible
Growth Oriented*



ABOUT TVA

The Tennessee Valley Authority is a unique federal corporation that supplies electricity and develops resources in a service area that covers Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia. TVA is America's largest producer of electric power. Through 160 municipal and cooperative power distributors, TVA serves more than 7 million people in an 80,000-square-mile (200,000-square-kilometer) region.



The TVA power system, which is self-financed, consists of three nuclear plants, 11 coal-fired plants (four of which have oil-fired combustion-turbine units), and 29 hydroelectric dams. TVA also manages the Tennessee River, the nation's fifth-largest river system. On September 30, 1995, TVA had 16,559 employees.

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Power System Statistics

For the years ended September 30 (millions of kilowatt-hours)

	1995	1994	Percent Change
System input			
System generation			
Hydro, including pumped storage	13,515	15,679	(14%)
Coal	94,347	92,058	2%
Nuclear	23,355	18,359	27%
Combustion turbine	393	239	64%
Total net generation	131,610	126,335	4%
Purchased	3,793	4,589	(17%)
Net interchange and wheeling	3,604	1,402	157%
Total system input	139,007	132,326	5%
System output			
Sales			
Municipalities and cooperatives	110,245	108,073	2%
Federal agencies	7,226	4,407	64%
Industries directly served	16,684	15,792	6%
Total sales	134,155	128,272	5%
Other	1,378	915	51%
Losses	3,474	3,139	11%
Total system output	139,007	132,326	5%
Winter net dependable capacity (megawatts)	25,831	25,880	—
Percent of average gross generation to winter net dependable capacity	64.39	62.06	4%
System peak load (megawatts)—summer	25,496	23,398	9%
System peak load (megawatts)—winter	24,676	24,723	—
Annual load factor	62.22	60.42	3%
Percent winter net dependable capacity by fuel source			
Coal	58%	58%	—
Hydro	20%	20%	—
Combustion turbine	9%	9%	—
Nuclear	13%	13%	—

**Serving Society's Global Needs**

As deregulation transforms the electric utility industry, TVA is working to become a leader in the global environment.

**Customer Driven**

Economic Edge, TVA's new economic development guidebook, highlights success stories exemplifying the economic vitality of the region.

**Employee Sensitive**

Total Quality at TVA is one of many video-based learning activities available to employees through TVA University.

**Environmentally Responsible**

The new scrubbers at TVA's Cumberland Fossil Plant are helping improve air quality in the region.

**Growth Oriented**

The Johnsonville Fossil Plant pipeline carries steam to the nearby E.I. DuPont De Nemours Company facility.



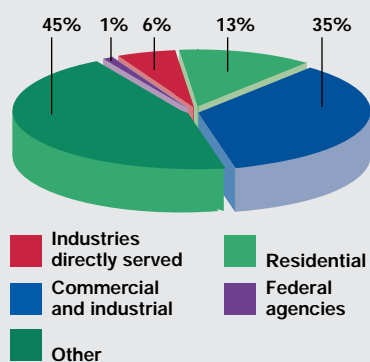
Financial Highlights—Power Program

For the years ended September 30 (millions of dollars)

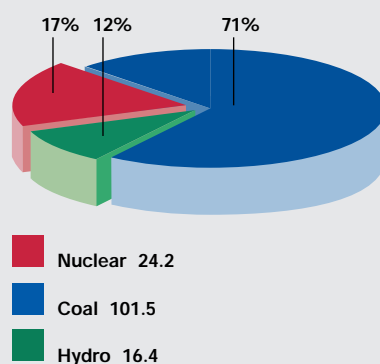
	1995	1994	Percent Change
Operating revenues	\$ 5,375	\$ 5,401	—
Operating expenses	3,448	3,461	—
Operating income	1,927	1,940	(1%)
Other (expense)	(91)	(59)	54%
Interest expense	1,826	1,730	6%
Net income	\$ 10	\$ 151	(93%)
Total assets	\$33,293	\$31,842	5%
Capitalization			
Long-term debt	\$ 23,889	\$ 22,922	4%
Proprietary capital	4,030	4,082	(1%)
Total capitalization	\$27,919	\$27,004	3%

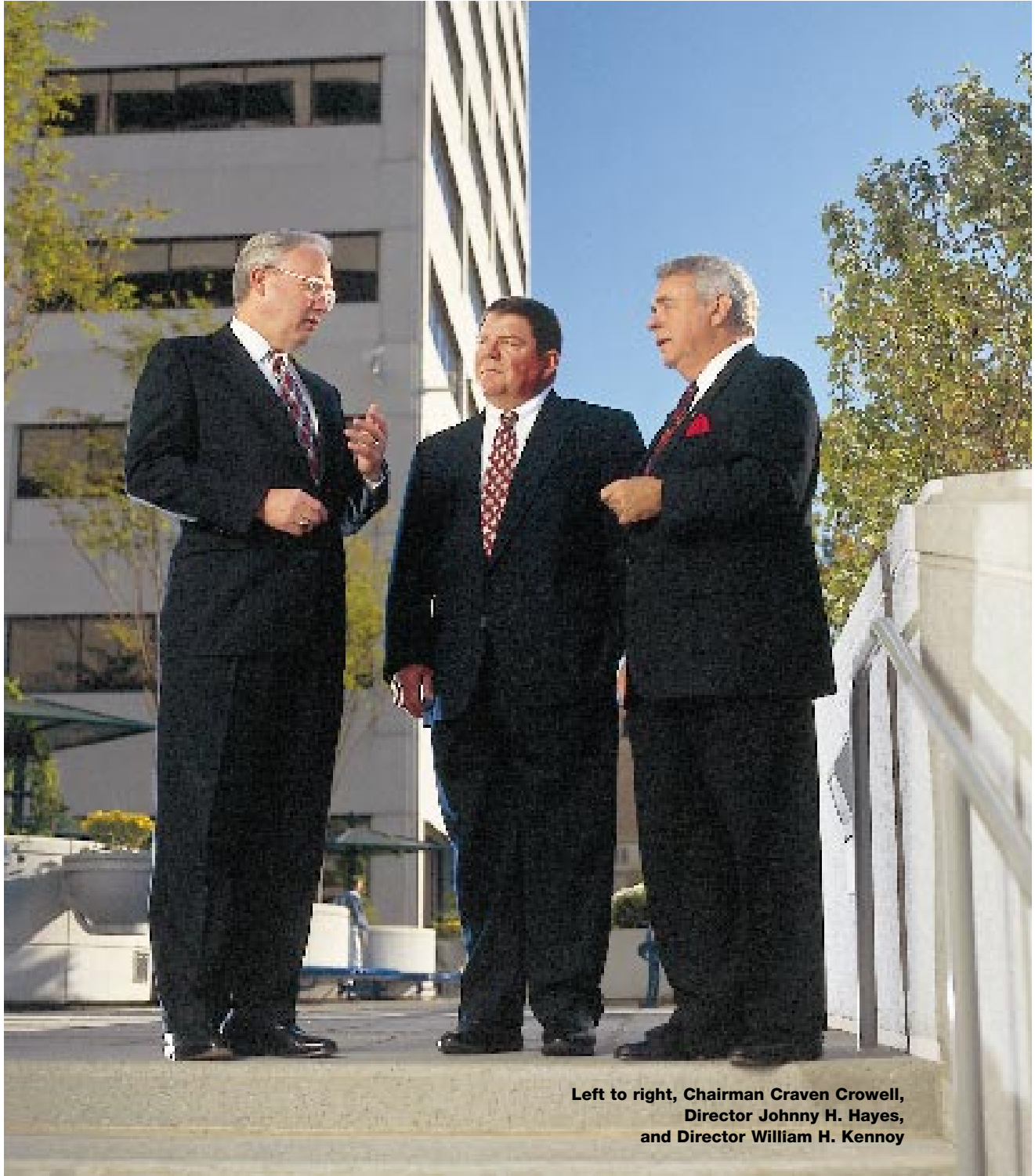
TVA is committed to competing in a deregulated utility environment and to being an energy leader in price, services, and environmental stewardship.

Sales by Customer Type



Generation Mix (gross in billions kwh)





**Left to right, Chairman Craven Crowell,
Director Johnny H. Hayes,
and Director William H. Kennoy**

During fiscal year 1995, TVA strengthened its leadership in the electric utility industry as we continue to prepare for the coming era of utility deregulation.

We held power rates stable for the ninth year in a row while reducing costs and improving efficiencies. Although operating revenues decreased from \$5.40 billion in FY94 to \$5.38 billion in FY95, electricity sales increased from 128.3 billion to 134.2 billion kilowatt-hours.

The decline in revenues resulted from customers taking advantage of flexible pricing structures designed to make TVA even more competitive. A large, long-term contract to sell electricity to the Department of Energy also came to an end.

In an annual report on America's top 100 utilities, *Electric Light & Power* magazine ranked TVA as the largest power producer in the United States and the twelfth lowest in production costs.

We are continuing to refinance TVA's debt on the private bond markets. In FY95, we successfully launched four new bond issues—one aimed at small retail investors, one sold on the global markets in Europe and Asia, one targeting a specialized group of institutional investors, and one offered through regional brokers in the Southeast. These offerings give us more financial flexibility, broaden our base of investors, and help establish TVA as a player in the international utility market.

In preparing TVA's strategic plans for the 21st century, we are exploring new businesses and alliances that will allow us to take advantage of the opportunities the deregulated utility industry will bring, here and abroad.

In the following pages, you will learn more about how TVA is fulfilling its vision of being a world energy leader, serving society's global needs.



Craven Crowell
Chairman

We are exploring new businesses and alliances that will allow us to take advantage of the opportunities the deregulated utility industry will bring, here and abroad.

— CHAIRMAN
CRAVEN CROWELL



**Chief Financial Officer David Smith
and Ann Williams**

TVA Bonds Go Global

When the Treasurer Organization's Program Manager Ann Williams traveled abroad in June to sell TVA bonds on the global market for the first time in TVA's history, she was surprised. "People in Europe knew so much about TVA," she says. "They had studied TVA in school and welcomed the opportunity to invest in our growth."

That made the job easier for Williams and three other TVA bond salespeople. The \$2-billion bond issue—the largest in history for a U.S. agency—sold out in just a few hours.

TVA entered the global bond market to develop a constituency of investors who can help TVA realize its vision of being the recognized leader in meeting the world's needs for energy and related services.

While Williams and Chief Financial Officer David Smith worked the European market—London, Milan, Brussels, Paris, Frankfurt, and Amsterdam—Senior Financial Analyst Diane Christian and TVA Treasurer John Hoskins visited Tokyo, Taipei, and Hong Kong.

About 39 percent of the bonds were sold in Europe, 28 percent in Asia, and 33 percent in the United States. The bonds, which mature in 10 years, have an interest rate of 6.375 percent annually.

Euroweek, a prominent European business weekly, described TVA's debut in the international bond market as "spectacular." Smith agrees. "We're a new borrower, so we're pleased they accepted us so readily," he says. "We now have investors around the world—companies and individuals willing to bet on TVA's future."

Williams, too, is highly encouraged. "As more people learn the value of TVA bonds, the potential for future sales is tremendous," she says.

■ By reducing costs to become globally competitive, TVA has saved more than \$750 million annually in the past few years.

Electric Light and Power magazine ranked TVA the largest electricity producer in the nation and twelfth among electric utilities with the lowest production costs.

■ TVA held its power rates stable for the ninth consecutive year.

■ TVA announced it will end its 28-year nuclear construction program and will cap its debt \$2-3 billion below the debt ceiling mandated by Congress.

■ The success of TVA's inaugural, \$2-billion global bond sale earned TVA the distinction of being named the "Debut Borrower of the Year" in *International Financial Review* magazine's year-end edition.





Evelyn Cheney and Randy Windschitl

TVA and Power Distributors Are Energy Right

"I don't know how I would have survived the summer without it," said Evelyn Cheney of suburban Chattanooga. She was talking about her new heat pump, purchased through TVA's *energy right* program. "And I really didn't know how much I enjoyed it until I got my first electric bill. It was cheaper than I had been paying for just two little window units!"

Mrs. Cheney is typical of thousands benefiting from *energy right*, TVA's innovative program that saves consumers money and gives power distributors a bigger slice of the energy market. The program, which is administered by 143 of the 160 distributors of TVA power, also helps TVA fulfill its goal of being truly customer-driven.

The program offers power distributors a variety of options for their customers—for instance, low-interest loans for customers who install heat pumps in existing homes, or guaranteed electric rates to customers who buy all-electric homes, energy-efficient manufactured homes, and homes with qualifying heat pumps. Incentives are also available for builders and heat-pump contractors.

The heat-pump program has been the most popular option to date. The manufactured-home program just started in 1995, but Randy Windschitl, *energy right* program manager, expects it too will be a big winner in the coming year.

"About one in four new homes in the region is a manufactured home," Windschitl says. "These homes typically come equipped with electric strip heating and are not always well insulated. But if they are properly insulated and have a high-efficiency heat pump and appliances, the owner can really save money."



■ *Economic Edge*, TVA's new economic-development guidebook, highlights success stories exemplifying the economic vitality of the region.

■ With the opening of nine economic-development centers across the Tennessee Valley, TVA gained more direct access to its customers to better serve their economic-development needs.

■ In an effort to better serve employees and public users of TVA property, TVA created a new federal law-enforcement organization, TVA Police, to handle all its law-enforcement matters.



Left to right:
Arun Puri, Plant Technical Services;
Michael Singh and Erich Kant, TVA Services

TVA Services: Helping At-Risk Employees Get Ahead

When TVA Services was created in late 1994, the organization had two objectives: to increase TVA revenue and to find new work for at-risk employees—those whose jobs are no longer needed. It has succeeded admirably, demonstrating that TVA's goal of being employee-sensitive is not only good for morale but good for business, too.

During 1995, at-risk employees who transferred into Services started a variety of businesses both within and outside TVA. Services' revenue goal for fiscal 1995 from these businesses was \$6 million. "We made that much in the first six months," says Services Vice President John O'Donnell.

Two of Services' many satisfied customers are Rick Keyser, Manager, TVA's Plant Technical Services Division, and Arun Puri, who works for him. "We get calls to do international consulting work," Keyser says. "In the past, it was hard to spare our people to do this, but now we can because we get qualified people from Services to supplement our staff."

Puri agrees. "It simply takes more people to meet the needs of internal clients and the new markets abroad; Services has enabled us to bridge the gap by offering staffing that readily adapts to the new challenge," he says.

"One thing that has made this job so personally rewarding is being able to place people in new jobs with a minimum of upset in their lives," O'Donnell says. "Another is to see their resilience. In the face of dramatic change, they really bounce back."

Services will continue to help TVA prepare for life in a more competitive world. "It's going to come down to this," O'Donnell says. "Can we change? Can we forgo the comforts of the past and adjust to the discomforts of the future? The answer for me is clear, and Services is a step in the right direction."



■ TVA University, which opened in May 1995, is helping employees keep current on business issues and develop the skills for TVA to compete on a global level.

■ TVA quality teams were semifinalists and one team was a finalist in the RIT/*USA Today* Quality Cup Award. Vice President Gore presented several teams with Hammer Awards. Several organizations also received Tennessee Quality Awards, and TVA's Fossil & Hydro Power Organization was a finalist in the President's Quality Award Program.

■ Following a year-long pilot program, TVA is rolling out its 360° Feedback system. Under the new performance system, feedback from peers and subordinates as well as supervisors will help managers identify their strengths and areas for improvement.



Bill and Liane Russell

Public Helps Shape Shoreline Policy

Property rights of lakefront owners, environmental protection, enhanced recreation opportunities, standards for shoreline development, scenic beauty—these were the main concerns of citizens attending public meetings throughout the Tennessee Valley to advise TVA on how to manage its 11,000 miles (18,000 kilometers) of shoreline.

Liane Russell of Oak Ridge, Tennessee, and her husband, Bill, were typical of those offering suggestions for a new shoreline-management policy. In one of the meetings, Liane Russell suggested TVA help landowners stabilize riverbanks, especially with native plants.

The Russells are also interested in expanding small wild areas—plots of land kept in a natural state. One of these—White's Creek Small Wild Area—is near the Russells' weekend cabin on Watts Bar Lake. "White's Creek is a beautiful example of what a small wild area can do," Liane Russell says. "It keeps the shoreline natural, protects the landscape, and preserves habitat for endangered species."

After analyzing the results of the public meetings, TVA began work on an environmental impact statement to identify various alternatives for guiding the way TVA will manage its shorelines in the future.

Because of public interest in preserving scenic beauty, TVA undertook a visual-preference survey to find out how the public responds to different types of landscapes. The results of the survey will also be incorporated into the environmental impact statement, says Tere McDonough, land management specialist and project leader for the new shoreline policy.

"Public interest has been great," McDonough says. "I don't know of another federal agency taking such a thorough look at shoreline management."



■ Cumberland Fossil Plant dedicated new scrubbers designed to remove 95 percent of the plant's sulfur-dioxide emissions. The project is one of the largest clean-air projects in the nation.

■ A group of 70 national organizations recognized TVA's Clean Water Initiative as a national model for watershed management. The program also received a Hammer Award from Vice President Gore for reinventing government.

■ TVA and the Electric Power Research Institute began developing a pollution-prevention program to serve as a national model for utilities. Another industrial waste-reduction program, which TVA piloted in 14 states, is saving companies an average of \$90,000 per facility per year.

■ TVA is reducing by 18 percent its projected greenhouse-gas emissions for the year 2000.



**Commercial Market Team, left to right:
Jacinda Woodward, Jim Rossman,
John Richardson, David Lamb,
Teresa Ashworth, and Elaine Thompson**

Building a Strategy for Success

Never before has focusing on the future been so important for TVA. To Alan Caron, Senior Vice President of Strategic Planning, the future means increased competition and more choices for customers.

“Global competition has been increasing in every sector of the business economy, and now it’s on the way for the electric industry,” Caron says. “On the local level, many states are looking for ways to open up the electricity market to retail buyers. A quarter of them are already considering legislation. The effect of deregulation on the gas industry—where choice is available on a customer-by-customer basis—is an indicator of the future.”

Caron says deregulation will create a new set of rules for the electric power industry. “We’ll be facing challenges unlike any in history,” he says. “We must resolve how we can continue to increase the standard of living and quality of life for all our stakeholders in an increasingly competitive environment.”

Under Caron’s direction, TVA established strategy-development teams of employees from different departments and levels throughout the corporation. Their job is to determine how TVA can best leverage its strengths and develop the capabilities needed to continue to prosper through deregulation and global competition.

Elaine Thompson, a Customer Service Manager and the leader of one of the strategy-development teams, sees deregulation and competition as a good thing for the growth of the region. “During the past several years, TVA has been improving operations while lowering costs,” Thompson says. “Today, we’re building for the future, and we’re excited about the opportunities the future will bring.”

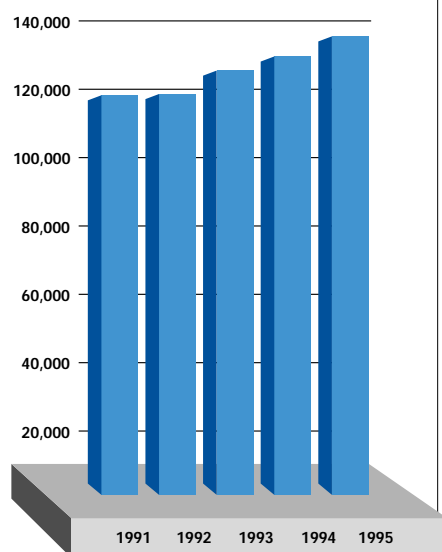


■ Johnsonville Fossil Plant began a project to supply steam to the E.I. DuPont DeNemours plant at New Johnsonville—the world’s largest titanium dioxide plant. This makes the first time TVA has supplied steam to a customer.

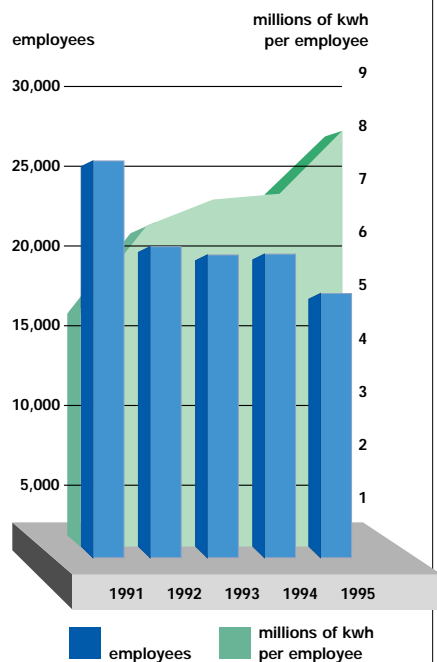
■ A draft of *Energy Vision 2020*, TVA’s integrated resource plan, was released in July 1995. The plan describes how TVA will meet the energy needs of the region during the next 25 years. The final plan was released in December 1995.

■ Thanks to long-term competitive prices and reliability, 120 plants located in the region, creating more than 20,000 jobs. Many of these plants, including two large manufacturers—Trico Steel L.L.C. in Decatur, Alabama, and Birmingham Steel Corporation in Memphis—received assistance through TVA’s revolving-loan program.

Sales of Electricity
(kwh in millions)



Productivity per Employee



Operating Environment

The financial results for 1995 are indicative of the challenges facing the electric-utility industry in general and TVA in particular. Net income for 1995 was \$10 million as compared with \$151 million for 1994. One of the primary reasons for the decrease in net income was a one-time \$136-million nonoperating charge for a voluntary early-out package accepted by about 2,500 employees in FY95. The current year expense associated with this early-out package was significant; however, this action, along with TVA's ongoing control of operating and financing costs, is reflective of TVA's commitment to reduce the cost of producing electricity.

TVA has continued to increase generation and sales over the past eight years even though the number of employees has decreased. Sales have increased from about 108-billion kilowatt-hours in 1987 to about 134-billion kilowatt-hours in 1995. This increase in kilowatt-hour sales is due in part to TVA's ability to maintain competitive rates. Rates have not risen in over nine years. In fact, because of economic pricing programs developed for industrial customers, average electric revenue per kilowatt-hour has steadily declined from 4.72 cents per kilowatt-hour in 1987 to 3.94 cents per kilowatt-hour in 1995.

The actions taken in recent years have enabled TVA to improve its competitive position, and TVA is confident that it will continue to be a leader in the rapidly changing electric-utility industry.

Operating Revenues

Operating revenue was \$5,375 million in 1995 as compared to \$5,401 million in 1994. The \$26-million decrease was primarily due to the inclusion of a \$160-million contract-termination settlement payment in the 1994 revenue. Excluding this 1994 payment, operating revenue increased \$134 million between 1995 and 1994. This increase was primarily due to an increase in kilowatt-hour sales of approximately 6 billion (5 percent), from 128 billion in 1994 to 134 billion in 1995. The increase in kilowatt-hour sales resulted from growth within the municipalities and cooperatives and federal agencies segments. The increase in kilowatt-hour sales, however, was offset by a decrease in the revenue per kilowatt-hour of approximately 1 mill

(2.2 percent) from 40.3 mills in 1994 to 39.4 mills in 1995. The decrease in revenue per kilowatt-hour was primarily due to a change in sales mix and continued economic-pricing options for customers.

Operating Expenses

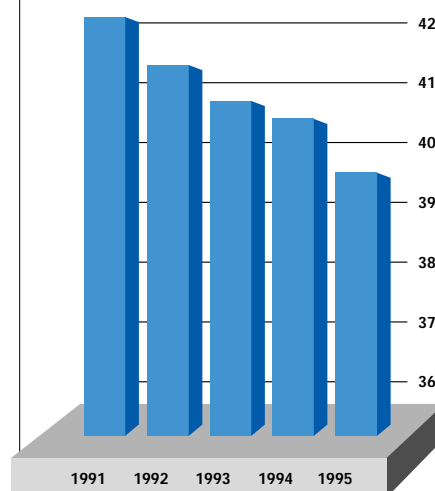
Operating expenses decreased \$13 million from \$3,461 million in 1994 to \$3,448 million in 1995. Fuel and purchased-power expense decreased \$50 million or 3 percent from \$1,493 million in 1994 to \$1,443 million in 1995. However, excluding a change in methods of accounting for nuclear fuel (see explanation below), fuel and purchased-power expense increased \$38 million or 2.7 percent due to a 4.2 percent increase in kilowatt-hours generated. Fuel costs did not increase in proportion to generation, primarily due to favorable coal prices.

The 1994 operating expenses included about \$88 million of nuclear fuel expense, which was excluded from the 1995 operating expenses due to a determination at the end of 1994 that the excess capitalized interest portion of nuclear fuel should be reclassified from nuclear fuel inventory to other deferred charges and amortized on a straight-line basis over an eight-year period. (See notes 1 and 2 to the financial statements.)

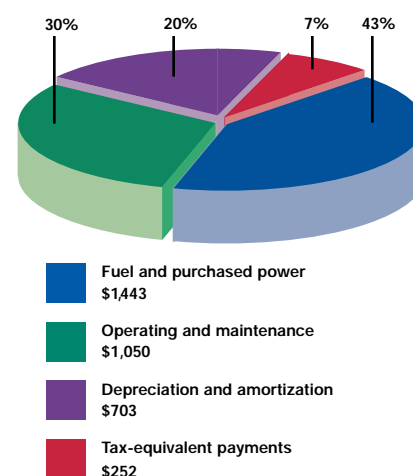
Operating and maintenance costs decreased \$31 million from \$1,081 million in 1994 to \$1,050 million in 1995. The decrease was primarily due to reduced labor expense resulting from the voluntary early-out package exercised by employees during FY95.

Depreciation and amortization expense was \$703 million and \$639 million in 1995 and 1994 respectively. The increase during 1995 of \$64 million was primarily due to depreciation on about \$1.7 billion of construction projects that were completed and placed in service during 1995.

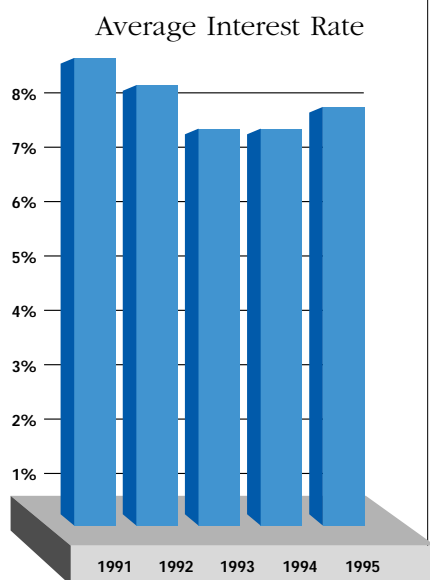
Average Revenue
(mills per kwh)



Operating Expenses
Fiscal year 1995 (millions of dollars)



■ Voluntary early-out incentives proved attractive to about 2,500 employees as TVA continued measures to cut costs and enhance competitiveness.



Other Income and Expense

During 1995 and 1994, TVA incurred net other expense of \$91 million and \$59 million respectively. The 1995 net expense was primarily comprised of a one-time \$136 million charge for the voluntary early-out package offered employees, and a write-off of nuclear fuel defabrication charges of about \$15 million, offset by the recognition of an \$81-million gain resulting from a 1993 sale of investments. The 1994 net expense of \$59 million was due to a \$140-million write-off of certain nuclear-fuel assets resulting from fuel exchanges, offset by an \$82-million gain on a 1993 sale of investments.

Interest

Gross interest charges increased \$171 million from \$1,853 million in 1994 to \$2,024 million in 1995. The change was due to a general increase in total outstanding debt during 1995 and an increase in the average interest rate. Total outstanding indebtedness net of unamortized discounts as of September 30, 1995, was \$26.7 billion with an average interest rate of 7.66 percent, compared to \$25.5 billion, with an average interest rate of 7.30 percent as of September 30, 1994. Effective October 1, 1994, TVA changed its method of determining the interest rate used to calculate the allowance for funds used during construction. The change, made to better reflect the nature of the debt issues used to finance construction, resulted in an increase in the allowance for funds used during construction of about \$56 million in 1995.

Liquidity and Capital Resources

TVA's power program is required to be self-supporting from revenues it produces and capital it raises in public markets. As the TVA Act does not authorize TVA to issue equity securities, TVA raises its capital requirements through the internal generation of funds or through borrowings subject to a congressionally mandated \$30-billion limit. Historically, TVA has accessed both the federal and public bond markets; since 1989, all capital needs have been met through issuances in the public sector.

TVA's capital requirements primarily relate to the construction of electric generating and transmission facilities. TVA has made significant investments in recent years

to complete and restart certain nuclear units and expand and upgrade its fossil and hydro generating units and its transmission system.

The 1996 expected completion of Watts Bar 1 and the restart of Browns Ferry 3 will significantly reduce TVA's future capital requirements. The planned reduction in capital expenditures has led TVA to self-impose an internal debt ceiling of about \$28 billion. During 1995 and 1994, TVA generated cash flow from operations of \$802 million and \$1,144 million respectively. The decrease in cash flow from operating activities of \$342 million from 1994 to 1995 was primarily due to a \$141-million reduction in net income in 1995 and fewer noncash expenses totaling \$208 million.

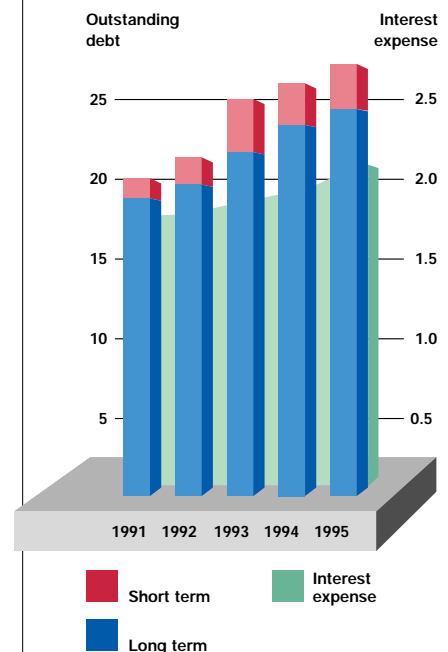
During 1995, TVA expanded its access to the capital markets with the issuance of four new types of securities. In March 1995, TVA issued \$600 million of subordinated debt in the form of Quarterly Income Debt Securities (QIDS). These securities have many of the characteristics of a preferred stock and are listed on the New York Stock Exchange. TVA also marketed \$200 million in bonds exclusively through a group of regional investment banking firms to strengthen the ties of TVA to the regional investment community and to target investors in the Tennessee Valley Region. In June 1995, TVA marketed \$2 billion of debt securities globally to expand its investor base to specifically include international institutional investors. That global bond issue, rated AAA by the Moody's Investors and Standard and Poors rating agencies, was the largest global issue ever offered by an agency of the U.S. government and paved the way for additional global offerings. In July 1995, TVA issued \$500 million of bonds, having both medium-term and long-term investment options, to a special group of institutional investors. TVA also reopened a previous bond issue in October 1994 and raised \$200 million.

Some \$2.5 billion of the proceeds from the 1995 offerings was primarily used to refinance existing debt and \$1 billion was used to finance capital expenditures.

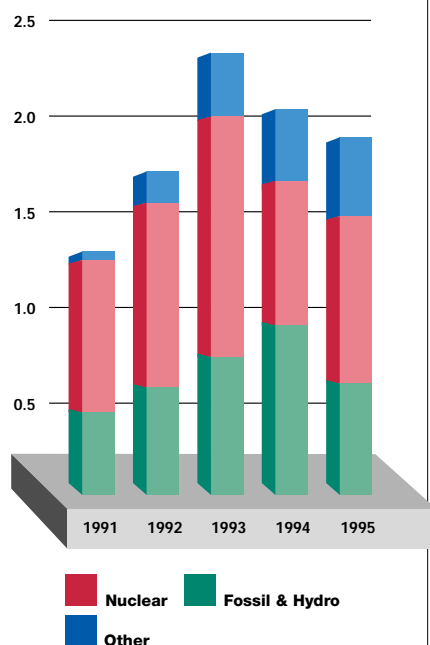
The expected reduction in capital expenditures, the self-imposed debt limit, and the expanding borrowing base will allow TVA to continue to effectively manage its capital requirements for the foreseeable future.

■ During FY95, TVA launched four new bond issues aimed at previously untapped markets—small retail investors, regional investors, a specialized group of institutional investors, and international investors.

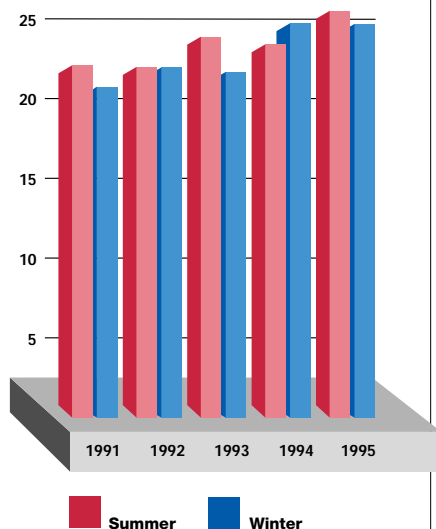
Outstanding Debt vs. Interest Expense
(billions of dollars)



Construction Expenditures
(billions of dollars)



System Peak Loads
(thousands of megawatts)



Construction Program

Construction expenditures decreased \$150 million or 7 percent from \$2.02 billion in 1994 to \$1.87 billion in 1995. The decrease was primarily due to the substantial completion of capital projects at Watts Bar 1 and Browns Ferry 3 and completion of the scrubber project at Cumberland Fossil Plant. Construction expenditures are expected to continue to decline as TVA brings Watts Bar 1 and Browns Ferry 3 into production during 1996.

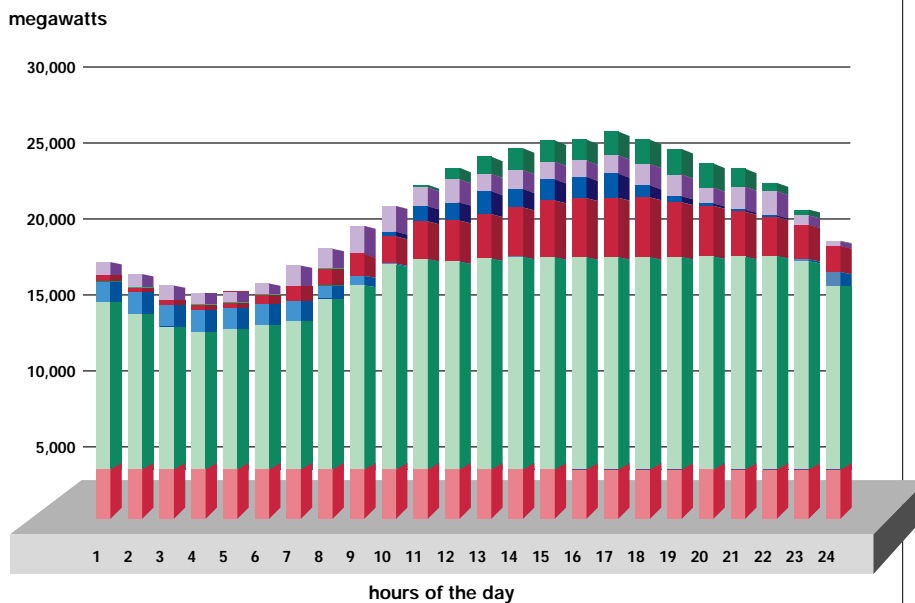
In FY95, TVA made significant decisions relative to its construction program, determining that TVA would not, by itself, complete Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. TVA is currently considering alternatives, such as converting these units to another fuel source and/or joint venturing with a partner for completion. (See note 2.)

The completion of Watts Bar 1 and the restart of Browns Ferry 3 will require about \$482 million during 1996. Once completed, these units will add approximately 2,400 megawatts of generating capacity. The fossil program expects to spend approximately \$480 million on the upgrade of generators and turbines and other improvements to the generating system to reduce emissions. The hydro-modernization program will continue in 1996 with capital expenditures expected to be about \$88 million. During 1996, TVA will also be making a substantial commitment to the transmission system. The existence of a dependable and reliable transmission system will be more important than ever in the increasingly competitive electric utility industry, and TVA will invest about \$250 million in 1996 to expand and improve the reliability of its transmission system. These expected capital expenditures will add generation capacity, maintain and upgrade the existing generating facilities, and improve the overall transmission facilities. Construction expenditures for 1996 are projected to be about \$1.3 billion.

System Operations

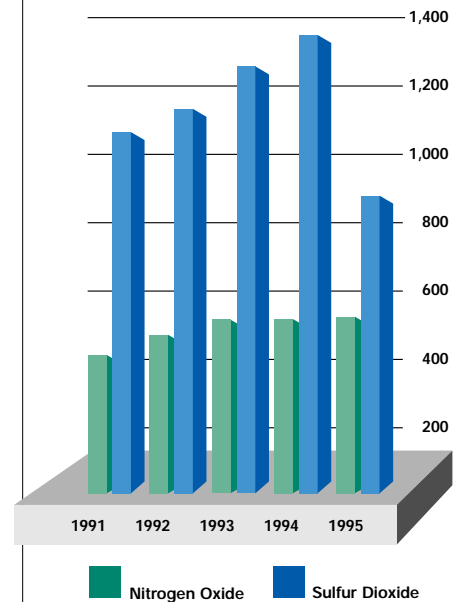
A major accomplishment for TVA's power system during the year was meeting an all-time system peak demand of 25,496 megawatts on July 13, 1995. Not only was a system peak reached but, most significantly, all customers' needs were met without interruption of service. TVA has continued to improve service to its customers by decreasing the number of minutes customer electricity needs are not met. During 1995, there was a nine-percent improvement from interruptions of 9.0 minutes in 1994 to 8.2 minutes in 1995.

TVA has undertaken significant capital projects at its fossil plants to reduce sulfur dioxide (SO₂), nitrogen oxides (NO_x), and other emissions (see note 10). The added technology will allow TVA to continue to purchase lower-cost high-sulfur coal and comply with the requirements of the Clean Air Act of 1990. During early 1995, the SO₂ scrubbers at Cumberland Fossil Plant were completed and emissions of SO₂ have decreased from 1,341 tons in 1994 to 871 tons in 1995, with further decreases projected for 1996 and thereafter. Three fossil plants placed low-NO_x burners in service during 1994 and 1995, and additional burners are scheduled to be installed in 1996.



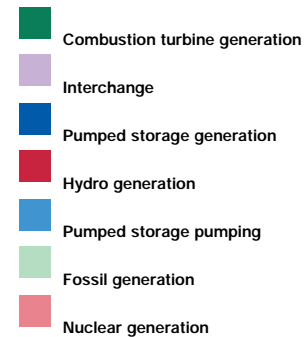
Emissions

(thousands of tons)



TVA Load and Supply

July 13, 1995

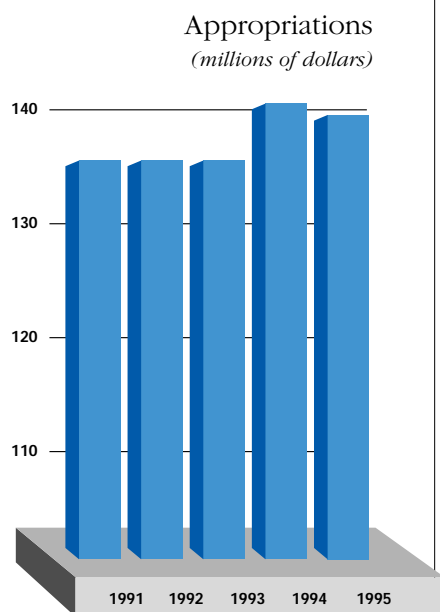


Net system load: 25,496 MW

Hour: 1700

Temperature: 97° F

Curtailments: none



■ Nonpower economic-development strategies focus on business start-ups and retentions to the largely rural communities of the Tennessee Valley.

■ TVA recreational water releases generated more than \$26 million for the local economy in FY95.

■ The percentage of agricultural shoreline protected by vegetation management programs increased from 56% to 79% in FY95.

Nonpower Programs

Nonpower activities include the general stewardship of the river system, federal lands and the environment, and economic development of the Tennessee Valley.

Funding for the nonpower programs is provided through federal appropriations. During 1995 and 1994, TVA received appropriations of \$139 million and \$140 million respectively. Certain nonpower activities are also funded by user fees and outside service revenues.

Proceeds during 1995 were used in the areas of stewardship, rural development, and environmental research. Funds from the stewardship program were used to complete upgrades to the Blue Ridge Dam and to initiate upgrades to the Guntersville Dam. Capital improvements were also made to the Pickwick and Chickamauga waterways to improve navigation.

One of the many ways TVA promotes sustainable economic development is by managing recreational water releases for the region. In related activities, TVA entered into an economic-development venture with local and federal agencies to make possible the white-water events for the 1996 Olympics on the Ocoee River. TVA also made investments in economic development through the establishment of seven telecommunications networks to provide business and government with advanced communications and linkages between certain counties in Tennessee, Kentucky, Alabama, Virginia, and North Carolina.

Advances in the area of environmental research have resulted in a 30-percent reduction in the amount of solid waste TVA is sending to landfills. TVA's Industrial Waste Reduction (IWR) program supported the completion of over 125 industrial waste-reduction audits during the year, and the IWR staff trained 50 waste-reduction auditors, representing pollution-prevention programs throughout the Southeast.

Construction of the Columbia Dam and Reservoir had been suspended in prior years primarily due to environmental concerns. During 1995, TVA determined that the \$82-million project financed by congressional appropriations would not be completed and, accordingly, construction costs of \$69 million were charged to net expense. (See note 11.)

Statements of Net Expense—Nonpower Programs

For the years ended September 30 (in millions)

	1995	1994	1993
Net expense			
Stewardship	\$ 63	\$ 78	\$ 73
Water and land	–	8	(3)
Land Between The Lakes	6	4	5
Rural development	23	20	23
Environmental Research Center	21	26	30
Columbia Dam	69	–	–
Net expense	\$182	\$136	\$128

Statements of Accumulated Net Expense—Nonpower Programs

	1995	1994	1993
Net expense	\$ 182	\$ 136	\$ 128
Accumulated net expense at beginning of period	2,939	2,803	2,675
Accumulated net expense at end of period	\$3,121	\$2,939	\$2,803

The accompanying notes are an integral part of these financial statements.

Balance Sheets

At September 30 (in millions)

	Power program		All programs	
Assets	1995	1994	1995	1994
Current assets				
Cash	\$ 52	\$ 2	\$ 131	\$ 152
Accounts receivable	681	676	698	720
Inventories, at average cost				
Fuel	104	104	104	104
Other	251	243	251	243
Total current assets	1,088	1,025	1,184	1,219
Property, plant and equipment				
Completed plant	18,412	16,700	19,488	17,845
Less accumulated depreciation	(6,061)	(5,584)	(6,351)	(5,861)
Net completed plant	12,351	11,116	13,137	11,984
Construction in progress	9,556	9,520	9,606	9,558
Deferred nuclear generating units	6,227	6,206	6,227	6,206
Nuclear fuel and capital lease assets	1,167	1,229	1,167	1,229
Total property, plant, and equipment	29,301	28,071	30,137	28,977
Investment funds	260	150	260	150
Deferred charges and other assets				
Loans and other long-term receivables	323	299	394	355
Debt issue and reacquisition costs	1,233	1,340	1,233	1,340
Other deferred charges	1,088	957	1,088	957
Total deferred charges and other assets	2,644	2,596	2,715	2,652
Total assets	\$33,293	\$31,842	\$34,296	\$32,998

The accompanying notes are an integral part of these financial statements

	Power program		All programs	
Capitalization and proprietary capital	1995	1994	1995	1994
Current liabilities				
Accounts payable	\$ 694	\$ 646	\$ 722	\$ 770
Accrued liabilities	130	196	141	221
Accrued interest	455	424	455	424
U.S. Treasury notes	150	150	150	150
Discount notes	2,681	2,459	2,681	2,459
Current maturities of long-term debt	1,306	716	1,306	716
Total current liabilities	5,416	4,591	5,455	4,740
Other liabilities	1,264	963	1,264	963
Long-term debt				
Senior debt—public bonds	19,153	19,146	19,153	19,146
Federal Financing Bank	3,200	3,400	3,200	3,400
Subordinated debt—public bonds	600	—	600	—
Unamortized discount	(370)	(340)	(370)	(340)
Total long-term debt	22,583	22,206	22,583	22,206
Proprietary capital				
Appropriation investment	628	648	4,713	4,594
Retained earnings reinvested in power program	3,402	3,434	3,402	3,434
Accumulated net expense of nonpower programs	—	—	(3,121)	(2,939)
Total proprietary capital	4,030	4,082	4,994	5,089
Total liabilities and proprietary capital	\$33,293	\$31,842	\$34,296	\$32,998

Statements of Income and Retained Earnings—Power Program

For the years ended September 30 (in millions)

	1995	1994	1993
Operating revenues			
Sales of electricity			
Municipalities and cooperatives	\$ 4,654	\$ 4,582	\$ 4,479
Federal agencies	179	296	254
Industries directly served	460	452	472
Other	82	71	71
Total operating revenues	5,375	5,401	5,276
Operating expenses			
Fuel and purchased power, net	1,443	1,493	1,401
Operating and maintenance	1,050	1,081	1,174
Depreciation and amortization	703	639	457
Tax-equivalent payments	252	248	237
Total operating expenses	3,448	3,461	3,269
Operating income	1,927	1,940	2,007
Other income and expense, net	(91)	(59)	23
Income before interest charges	1,836	1,881	2,030
Interest charges			
Interest on debt	1,908	1,731	1,666
Amortization of debt discount, issue, and reacquisition costs, net	116	122	111
Allowance for funds used during construction	(198)	(123)	(58)
Net interest charges	1,826	1,730	1,719
Net income	10	151	311
Return on appropriation investment	42	42	48
Increase (decrease) in retained earnings	(32)	109	263
Retained earnings reinvested at beginning of period	3,434	3,325	3,062
Retained earnings reinvested at end of period	\$3,402	\$3,434	\$3,325

The accompanying notes are an integral part of these financial statements.

Statements of Cash Flows

For the years ended September 30 (in millions)

	Power program			All programs		
	1995	1994	1993	1995	1994	1993
Cash flows from operating activities						
Net power income	\$ 10	\$151	\$ 311	\$ 10	\$151	\$311
Net expense of nonpower programs	—	—	—	(182)	(136)	(128)
Items not requiring (providing) cash						
Depreciation and amortization	715	639	457	728	651	467
Allowance for funds used during construction	(198)	(123)	(58)	(198)	(123)	(58)
Nuclear fuel amortization	112	176	—	112	176	—
Other, net	72	217	120	142	216	120
Changes in current assets and liabilities						
Accounts receivable	(5)	76	(59)	22	66	(68)
Inventories	(8)	99	(25)	(8)	99	(25)
Accounts payable and accrued liabilities	74	(23)	(186)	(36)	(51)	(185)
Accrued interest	31	(21)	(35)	31	(21)	(35)
Other	(1)	(47)	(22)	(2)	(47)	(23)
Net cash provided by operating activities	802	1,144	503	619	981	376
Cash flows from investing activities						
Construction expenditures	(1,868)	(2,015)	(2,311)	(1,880)	(2,023)	(2,319)
Allowance for funds used during construction	198	123	58	198	123	58
Nuclear fuel	(77)	70	(2,275)	(77)	70	(2,275)
Investments	(100)	(26)	539	(100)	(26)	539
Other, net	(24)	(80)	139	(39)	(77)	130
Net cash used in investing activities	(1,871)	(1,928)	(3,850)	(1,898)	(1,933)	(3,867)
Cash flows from financing activities						
Long-term debt						
Issues	3,500	6,381	4,669	3,500	6,381	4,669
Redemptions	(2,503)	(3,175)	(638)	(2,503)	(3,175)	(638)
Debt defeased	—	(1,493)	(1,929)	—	(1,493)	(1,929)
Short-term borrowings, net	222	(726)	1,628	222	(726)	1,628
Borrowing expenses, net	(38)	(252)	(359)	(38)	(252)	(359)
Congressional appropriations	—	—	—	139	141	136
Payments to U.S. Treasury	(62)	(62)	(68)	(62)	(62)	(68)
Net cash provided by financing activities	1,119	673	3,303	1,258	814	3,439
Net change in cash	50	(111)	(44)	(21)	(138)	(52)
Cash at beginning of period	2	113	157	152	290	342
Cash at end of period	\$ 52	\$ 2	\$ 113	\$131	\$152	\$290

The accompanying notes are an integral part of these financial statements.

1) Summary of significant accounting policies

General

TVA is a wholly owned corporate agency and instrumentality of the United States. It was established by the TVA Act with the objective of developing the resources of the Tennessee Valley region in order to strengthen the regional and national economy and the national defense by providing: (1) an ample supply of power within the region, (2) navigable channels and flood control for the Tennessee River system, and (3) agricultural and industrial development and improved forestry in the region.

TVA's programs are divided into two types of activities—the power program and the nonpower programs. Substantially all TVA revenues and assets are attributable to the power program. The power program is separate and distinct from the nonpower programs and is required to be self-supporting from power revenues and funds borrowed from public markets. The power program receives no congressional appropriations. Most of the funding for TVA's nonpower programs is provided by congressional appropriations. Certain nonpower activities are also funded by various revenues and user fees. Financial accounts for the power and nonpower programs are kept separately.

Power rates are established by the TVA Board of Directors as authorized by the TVA Act. The TVA Act requires TVA to charge rates for power which, among other things, will produce gross revenues sufficient to provide funds for operation, maintenance, and administration of its power system; payments to states in lieu of taxes; debt service on outstanding indebtedness; and annual payments to the U.S. Treasury in repayment of and as a return on the government's initial appropriation investment in TVA power facilities.

Property, plant, and equipment and depreciation

Additions to plant are recorded at cost, which includes direct and indirect costs such as general engineering, a portion of

corporate overhead, and an allowance for funds used during construction. The cost of betterments is capitalized and the cost of current repairs and minor replacements is charged to operating expense. The TVA Act requires TVA's Board of Directors to allocate between the power and nonpower programs, subject to the approval of the President of the United States, the cost of completed multipurpose projects. The original cost of property retired, together with removal costs less salvage value, is charged to accumulated depreciation. Straight-line depreciation is provided for substantially on a composite basis. Rates of depreciation are derived from engineering studies of useful life. The average of the composite rates that were applied individually to each major class of plant for fiscal years 1995, 1994, and 1993 was 3.19 percent, 3.14 percent, and 3.06 percent, respectively.

Decommissioning costs

Provision for decommissioning costs of nuclear generating units is based on the estimated cost, using the dismantling/removal method. The amount stated in 1994 dollars for Browns Ferry is \$800 million, and \$490 million for Sequoyah. The excess of the annual decommissioning provision over earnings from any investments designated for funding decommissioning costs is charged to depreciation expense.

Allowance for funds used

The practice of capitalizing an allowance for funds used during construction is followed in the power program. The allowance is applicable to construction in progress excluding deferred nuclear generating units and Watts Bar 1, which is substantially complete. Effective October 1, 1994, TVA changed its method of determining the interest rate used to calculate the allowance for funds used during construction. The change was made to more accurately reflect the nature of the indebtedness issued to fund construction. The effect of the change for fiscal 1995 was to increase the amount of interest capitalized by approximately \$56 million.

Nuclear fuel

Prior to 1994, the cost of nuclear fuel, including disposal and capitalized interest, was amortized on the basis of generation and charged to fuel expense. Effective for 1994, TVA elected to reclassify a \$1,009 million capitalized interest component of nuclear fuel to other deferred charges. This regulatory asset is being amortized on a straight-line basis over an eight-year period. The effect of this change was to increase amortization expense by \$126 million for 1995 and 1994. The remaining balance of nuclear fuel will continue to be amortized based on generation. Related financing costs are capitalized as a component of the nuclear fuel acquired.

Investment funds

Prior to September 1993, \$210 million of power funds was invested in zero-coupon bonds in order to provide funding for decommissioning nuclear power plants. In September 1993, TVA determined that the portfolio of investments designated for funding decommissioning could be sold and such proceeds reinvested in instruments that would yield greater proceeds over the remaining term to decommissioning dates. Accordingly, these investments were sold for \$373 million and TVA realized a gain of \$163 million. The gain was deferred and amortized into income over a 24-month period beginning in October 1993. As of September 30, 1995, a \$260 million investment portfolio consisting of short-term marketable securities had been reestablished. TVA is currently reviewing

various investment alternatives designed to ensure sufficient funding at decommissioning dates.

Debt-issuance costs

Issue and reacquisition expenses, call premiums and other related costs, and discounts on power borrowings are deferred and amortized (accreted), respectively, on a straight-line basis over the term of the related outstanding securities.

Tax-equivalent payments

The TVA Act requires TVA to make payments to states and local governments in which the power operations of the corporation are conducted. The basic amount is 5 percent of gross revenues from the sale of power to other than federal agencies during the preceding year, with the provision for minimum payments under certain circumstances.

Statements of cash flows

Cash includes the cash available in commercial bank accounts and U.S. Treasury accounts. During fiscal years 1995, 1994, and 1993, interest paid (net of amount capitalized) was \$1,678 million, \$1,628 million, and \$1,642 million, respectively.

2) Nuclear power program

The nuclear power program at September 30, 1995, consists of nine units at four locations with investments as follows and in the status indicated:

(in millions)

	Units	Capacity (megawatts)	Completed plant, net	Construction in progress	Deferred	Fuel investment
Sequoyah	2	2,442	\$ 1,995	\$ 149	\$ —	\$ 106
Browns Ferry	3	3,456	2,266	1,488	—	201
Watts Bar	2	2,540	—	6,919	1,660	85
Bellefonte	2	2,664	—	—	4,567	—
Raw materials			—	—	—	565
Total		11,102	\$4,261	\$8,556	\$6,227	\$957

Sequoyah 1, which was operational during 1995, began a refueling outage in September 1995, and returned to service during November 1995. Sequoyah 2 returned to service in November 1994, following a refueling outage. Sequoyah 1 and 2 are currently operating at full power.

Browns Ferry 2 returned to service in November 1994, following a refueling outage and is currently operating at full power. Browns Ferry 1 and 3 were taken off-line in March 1985, for plant modifications and regulatory improvements. In October 1995, TVA loaded fuel in Browns Ferry 3 and plans to return this unit to service in 1996. The return-to-service date for Browns Ferry 1 is currently under review in the integrated resource planning effort as discussed below.

During November 1995, TVA received a low-power operating license from the Nuclear Regulatory Commission for Watts Bar 1. TVA loaded fuel in November 1995 and plans to bring Watts Bar 1 into commercial operation in 1996.

In 1988, TVA suspended construction activities on Watts Bar 2, and the unit is currently in lay-up. Bellefonte 1 and 2 were deferred in 1988 and 1985, respectively. Budgeted 1996 expenditures for the three units total \$10 million and are limited to lay-up, maintenance, and ensuring that options remain viable. For financial reporting purposes, the cost of the three units is presented as deferred nuclear generating units.

In 1993, TVA began an integrated resource planning process from which information will be utilized to determine TVA's strategy for meeting future customer energy demands. As part of its long-term energy strategy, TVA is reevaluating the need for finishing Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. Preliminary cost estimates show that completing these facilities as nuclear units could cost as much as \$8.8 billion, which indicates their completion may not be economically feasible. In December 1994, TVA determined it will not, by itself, complete Bellefonte 1 and 2 and Watts Bar 2 as nuclear units. During July 1995, TVA issued a draft of its Integrated Resource Plan (IRP) which identified as a viable

option the conversion of the Bellefonte facility to a combined cycle plant utilizing natural gas or gasified coal. The feasibility of converting Bellefonte to an alternate fuel will require in-depth engineering and financial analysis, and, accordingly, TVA will utilize an outside team of technical and financial experts. The feasibility study is expected to be completed in early 1997. Subsequent to completion of the IRP, the TVA Board will consider alternatives, including converting the units to another fuel source and/or completing them with a partner. The draft IRP also concluded that Watts Bar 2 and Browns Ferry 1 should remain in deferred status until completion of the Bellefonte study. The impact on TVA's financial position of completing, converting, or joint venturing these units will be determined upon completion of the Bellefonte study. The future decisions on these units will ultimately impact the method of cost recovery, and the TVA Board has determined that it will, at that time, establish rate adjustments and operating policies to ensure full recovery of the cost of these units and compliance with the requirements of the TVA Act.

Nuclear fuel

In order to monetize a portion of its investment in nuclear fuel, TVA has converted certain fuel assemblies to forms suitable for use at alternate sites and entered into various agreements wherein certain nuclear fuel was loaned or exchanged for fuel-related services and other consideration. As the book value of the natural uranium component of TVA's nuclear fuel exceeds market value, TVA recognized charges in the statements of income related to such transactions totaling \$31 million in 1995 and \$140 million in 1994. As of September 30, 1995, the natural uranium component of the total nuclear fuel asset exceeds current market value by an estimated \$330 million. TVA believes that the total nuclear fuel asset book value of \$957 million will result in average nuclear fuel costs which are within the industry range. During 1993, TVA repurchased nuclear fuel that was previously under capital lease.

3) Completed plant—Power program

Completed plant stated at gross cost consists of the following at September 30:

	1995			1994		
	Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net
Power program						
Fossil plants	\$ 6,826	\$ 2,607	\$ 4,219	\$ 5,712	\$ 2,458	\$ 3,254
Nuclear plants	5,813	1,552	4,261	5,664	1,365	4,299
Transmission	2,659	934	1,725	2,457	885	1,572
Hydro plants	1,184	449	735	1,152	433	719
Other	1,930	519	1,411	1,715	443	1,272
Total power	\$18,412	\$6,061	\$12,351	\$16,700	\$5,584	\$11,116

4) Leases

TVA presently leases property, plant, and equipment under lease agreements with terms ranging from one to 30 years. Most of the agreements include purchase options and/or renewal options that cover substantially all the economic lives of the properties.

Obligations under capital lease agreements in effect at September 30 were:

(in millions)	
Fiscal year	General plant capital leases
1996	\$ 36
1997	36
1998	36
1999	36
2000	36
Thereafter	372
Total future minimum lease payments	552
Interest element included	(342)
Present value of future minimum lease payments	\$210

5) Appropriation investment—Power program

Changes in the appropriation investment during the fiscal years ended September 30 were:

(in millions)	1995	1994	1993
Power program			
Congressional appropriations	\$1,419	\$1,419	\$1,419
Transfers of property from other federal agencies	24	24	24
Repayments to general fund of the U.S. Treasury	(815)	(795)	(775)
Net appropriation investment	\$ 628	\$ 648	\$ 668

The TVA Act requires payment to the U.S. Treasury from net power proceeds of a return on the net appropriation investment in power facilities plus an annual repayment of such investment. The annual required repayment is \$20 million through the year 2014. The payments required by the TVA Act may be deferred under certain circumstances for not more than two years. The amount of return paid in 1995 was \$42 million and is based on the appropriation investment as of the beginning of the year and the computed average interest rate payable by the U.S. Treasury on its total marketable public obligations as of the same date.

6) Borrowing Authority

The TVA Act authorizes TVA to issue bonds, notes, and other evidences of indebtedness up to a total of \$30 billion outstanding at any one time. TVA must meet certain cash flow and earnings tests that are contained in the TVA Act and the Basic TVA Power Bond Resolution. Debt service on these obligations, which is payable solely from TVA's net power proceeds, has precedence over the payment to the U.S. Treasury described in note 5. Issues outstanding at September 30, 1995, and 1994 (excluding defeased debt of \$1.2 billion and \$3.8 billion, respectively, which is not considered to be debt that is subject to the \$30 billion bond limit) consist of the following:

Between October 1989 and September 1995, TVA sold \$23.4 billion in power bonds to the public, using the proceeds to advance refund \$21.7 billion in previously issued long-term debt. Bond issues of \$17.5 billion held by the public are redeemable in whole or in part at TVA's option on call dates ranging from the present to July 2020, at call prices ranging from 100 percent to 106.7 percent of the principal amount. TVA incurred premiums totaling \$1.4 billion to effect these advance refundings, which premiums are being deferred and recognized as an expense ratably through the maturity dates of the new debt issues. Certain advance refundings were effected through in-substance defeasance transactions, wherein TVA transferred sufficient funds to establish

<i>(in millions)</i>	1995	1994
Short-term debt		
U.S. Treasury	\$ 150	\$ 150
Held by public		
Discount notes (net of discount)	2,681	2,459
Current portion of long-term debt—3.41% to 4.25%	1,306	716
Total short-term debt	4,137	3,325
Long-term debt		
Held by the public—senior		
Maturing in fiscal year 1996—3.81% to 5.94%	—	1,306
Maturing in fiscal year 1997—3.30% to 6.87%	2,250	3,137
Maturing in fiscal year 1998—5.07% to 6.98%	453	653
Maturing in fiscal year 1999—6.25% to 7.625%	1,550	1,650
Maturing during fiscal years 2000 through 2045—6.125% to 8.625%	14,900	12,400
Held by Federal Financing Bank—senior		
Maturing during fiscal years 2003 through 2017—7.285% to 11.695%	3,200	3,400
Held by public—subordinated		
Maturing in fiscal year 2045—8.00%	600	—
Total long-term debt	22,953	22,546
Unamortized discount	(370)	(340)
Net long-term debt	22,583	22,206
Total debt	\$26,720	\$25,531

irrevocable trusts to hold securities that are scheduled to earn interest and mature in amounts sufficient to meet debt service requirements. At September 30, 1995, and 1994, TVA had outstanding long-term debt of \$1.2 billion and \$3.8 billion respectively, which had been defeased.

The interest rate on short-term debt owed to the U. S. Treasury as of September 30, 1995, was 6.00 percent and the weighted average rate applicable to short-term debt outstanding in the public market as of September 30, 1995, was 5.79 percent.

During fiscal years 1995, 1994, and 1993, the maximum outstanding balance of short-term borrowings held by the public was (in millions) \$3,503, \$4,062, and \$3,302, respectively, and the average amounts (and weighted average interest rates) of such borrowings were approximately (in millions), \$2,743 (5.83 percent), \$3,163 (3.75 percent), and \$2,117 (3.19 percent), respectively.

7) Fair value of financial instruments

The methods and assumptions used to estimate the fair values of each class of financial instruments are in accordance with Statement of Financial Accounting Standards No. 107, "Disclosures About Fair Value of Financial Instruments."

Cash, investment fund, and short-term debt

The carrying amount approximates fair value because of the short-term maturity of these instruments.

Loans and long-term receivables

Fair values for these homogeneous categories of loans and receivables are estimated by determining the present value of future cash flows using the current rates at which similar loans are presently made to borrowers with similar credit ratings and for the same remaining maturities.

Bonds

Fair value of long-term debt traded in the public market is determined by multiplying the par value of the bonds by the quoted market price (asked price) nearest the balance sheet date. The fair value of other long-term debt and long-term debt held by the Federal Financing Bank is estimated by determining the present value of future cash flows using rates of financial instruments with quoted market prices of similar characteristics of the same remaining maturities.

The estimated values of TVA's financial instruments at September 30 are as follows:

(in millions)	1995		1994	
	Carrying amount	Fair amount	Carrying amount	Fair amount
Cash	\$ 131	\$ 131	\$ 152	\$ 152
Investment fund	260	260	150	150
Loans and long-term receivables	394	378	355	345
Short-term debt	2,831	2,831	2,609	2,609
Long-term debt, including current maturities	24,259	24,426	23,262	22,590

8) Retirement plans

Pension plan

TVA has a contributory, defined benefit plan covering most full-time employees. Plan assets are primarily stocks and bonds. TVA contributes to the plan such amounts as are necessary on an actuarial basis to provide assets sufficient to meet the obligations for benefits. The pension amount is

based on the member's years of creditable service, average base pay for the highest three consecutive years, and the pension rate for the member's age and years of service, less a Social Security offset.

The components of pension expense for fiscal years ended September 30 were:

<i>(in millions)</i>	1995	1994	1993
Service cost	\$ 62	\$ 76	\$ 77
Interest cost on projected benefit obligation	304	275	256
Actual return on assets	(816)	(32)	(512)
Net amortization and deferral	450	(307)	209
Net pension costs	\$ 0	\$ 12	\$ 30

The plan's actual funded status was:

Actuarial present value of benefit obligations

Vested benefit obligation	\$(3,256)	\$(2,839)	\$(2,844)
Nonvested benefits	(113)	(111)	(106)
Accumulated benefit obligation	(3,369)	(2,950)	(2,950)
Effects of projected future compensation	(323)	(389)	(409)
Projected benefit obligation	(3,692)	(3,339)	(3,359)
Plan assets at fair value	4,375	3,674	3,718
Excess of plan assets over projected benefit obligation	683	335	359
Unrecognized net gain	(627)	(280)	(343)
Unrecognized net obligation being amortized over 15 years beginning October 1, 1987	2	3	3
Prepaid pension cost	\$ 58	\$ 58	\$ 19

The discount rate used to determine the actuarial present value of the projected benefit obligation was 7.5 percent in 1995, 8.5 percent in 1994, and 8.0 percent in 1993. The assumed annual rates of increase in future compensation

levels for 1995 range from 3.3 to 8.3 percent, 1994 ranged from 4.3 to 9.3 percent, and 1993 ranged from 3.5 to 9.3 percent. The expected long-term rate of return on plan assets was 11 percent for 1995, 1994, and 1993.

Other postretirement benefits

TVA sponsors an unfunded defined benefit postretirement plan which provides for contributions toward the cost of retirees' medical coverage. The plan covers employees whose age plus years of service at retirement equals 60 or

more. TVA's contributions are a flat dollar amount based upon the participants' age and years of service and certain payments toward the plan costs.

The following sets forth the plan's funded status at September 30:

<i>(in millions)</i>	1995	1994	1993
Accumulated postretirement benefit obligation (APBO)			
Retirees	\$ 214	\$ 166	\$ 144
Fully eligible active plan participants	1	1	1
Other active plan participants	116	114	139
	331	281	284
Unrecognized net gain (loss)	(15)	6	(5)
Accrued postretirement benefit cost	\$316	\$287	\$279
Net periodic postretirement benefit cost for these fiscal years included the following components:			
Service cost	\$ 7	\$ 10	\$ 9
Interest cost	26	22	22
Amortization of gain	—	(5)	—
Net periodic postretirement benefit cost	\$ 33	\$ 27	\$ 31

The annual assumed cost trend for covered benefits is 11.5 percent in fiscal year 1995, decreasing by one-half percent per year reaching 5.5 percent in 2007 and thereafter. For fiscal years 1994 and 1993, an annual trend rate of 13.0 percent and 13.5 percent respectively was assumed. The effect of the change in assumptions on a cost basis was not significant. Increasing the assumed health-care cost trend rates by one percent would increase the accumulated postretirement benefit obligation (APBO) as of September 30, 1995,

by \$20 million and the aggregated service and interest cost components of net periodic postretirement benefit cost for 1995 by \$2 million.

The weighted average discount rate used in determining the APBO was 7.5 percent for fiscal year 1995, 8.5 percent for fiscal year 1994, and 8.0 percent for fiscal year 1993. Gains and losses resulting from experience different from that assumed or from changes in assumptions are amortized using a straight-line method over four years.

Other postemployment benefits

Statement of Financial Accounting Standards, "Employers Accounting for Postemployment Benefits" (SFAS No. 112) applies to postemployment benefits, including workers' compensation provided to former or inactive employees, their beneficiaries, and covered dependents after employment, but before retirement. Adoption of SFAS No. 112 on October 1, 1994, changed TVA's method of accounting from recognizing costs as benefits are paid, to accruing the expected costs of providing these benefits. This resulted in recognition of a transition obligation of approximately \$280 million. In connection with adoption of SFAS No. 112, TVA recorded a regulatory asset of \$280 million, which is being amortized over approximately 15 years whereby the annual expense will approximate the expense recorded prior to adoption of SFAS No. 112.

1995 early-out termination package

During 1995, TVA made available a voluntary early-out benefit termination package which was accepted by approximately 2,500 employees at a cost of \$148 million. The components of the package consisted of severance pay (\$74 million), retirement benefits (\$52 million) and postretirement health benefits (\$22 million). Of the total cost, \$136 million was applicable to the power program and was charged to other expense during 1995. The remaining \$12 million was applicable to nonpower operations and was recorded by the power program as a long-term receivable to be recovered from future available nonpower funds.

9) Major customers

In accordance with contract provisions, the Department of Energy (DOE) exercised its right prior to fiscal year 1987 to reduce the amount of electric power it would purchase from TVA. TVA and DOE reached an agreement in December 1987, whereby DOE's payment obligations were satisfied through a series of payments to TVA totaling over \$1.8 billion

between 1987 and 1994. Scheduled payments of \$160 million were included in revenues in 1993 and 1994.

One municipal customer accounts for approximately 10 percent of total power sales and four other municipal customers account for an additional 21 percent of total power sales. All five of these municipal customers have contracts without stated expiration dates, and in no event would the remaining contract term be less than 10 years.

10) Construction expenditures and commitments and contingencies

Construction expenditures, including capitalized interest, are estimated to be \$1.3 billion for fiscal year 1996. Estimates for capital expenditures beyond 1996 will depend upon the outcome of TVA's integrated resource planning effort. These estimates are revised periodically to reflect changes in economic conditions and other factors considered in their determination. Substantial commitments have been incurred for these projects. Approximately \$2.7 billion in long-term commitments, ranging in terms of up to nine years, have been entered into for the purchase of coal.

Nuclear insurance

The Price-Anderson Act sets forth an indemnification and limitation of liability plan for the U.S. nuclear industry. All Nuclear Regulatory Commission (NRC) licensees, including TVA, maintain nuclear liability insurance in the amount of \$200 million for each plant with an operating license. The second level of financial protection required is the industry's retrospective assessment plan, using deferred premium charges. The maximum amount of the deferred premium for each nuclear incident is approximately \$79 million per reactor, but not more than \$10 million per reactor may be charged in any one year for each incident. TVA could be required to pay a maximum of \$396 million per nuclear incident on the basis of its five licensed units, but it would have to pay no more than \$50

million per incident in any one year. Some of the amounts include a 5 percent surcharge if additional funds are needed to satisfy public liability claims and legal costs and are subject to adjustment for inflation.

In accordance with NRC regulations, TVA carries, at each licensed nuclear plant, property and decontamination insurance of \$1.06 billion for the cost of stabilizing or shutting down a reactor after an accident. Some of this insurance may require the payment of retrospective premiums of up to a maximum of approximately \$30 million.

Acid rain legislation

The Clean Air Act Amendments of 1990 will result in substantial expenditures for the reduction of sulfur dioxide, nitrogen oxide, and possible toxic emissions at several of TVA's coal-fired generating plants. TVA's present compliance strategy to reduce sulfur dioxide includes adding scrubbers at three fossil plants and the use of low-sulfur coal at seven fossil plants. During 1995, TVA completed the addition of scrubbers at one of three targeted plants at a cost of \$638 million. Additionally during 1995, TVA effected low-sulfur fuel switches at two of the seven targeted plants. TVA will achieve nitrogen oxide emission reductions required before January 1, 1996, as a result of the installation of low-nitrogen-oxide burners at 13 of its 19 units. Annual operating and fuel expenses (excluding capital recovery) could increase \$30 to \$70 million over current fossil operating expenses for the years 1996 through 1999. Phase 2 requirements become effective in the year 2000. The cost of compliance cannot reasonably be determined at this time due to the uncertainties surrounding final Environmental Protection Agency (EPA) regulations, resultant compliance strategy, potential for development of new emission control technologies, and future amendments to the legislation. Requirements for toxic emissions have not been determined by the EPA.

Litigation

TVA is a party to various civil lawsuits and claims that have arisen in the ordinary course of its business. Although the outcome of pending litigation cannot be predicted with any certainty, it is the opinion of TVA counsel that the ultimate outcome should not have a material adverse effect on TVA's financial position or results of operations.

11) Nonpower programs

TVA's nonpower programs are charged with the delivery of various public services. These public services include managing the Tennessee Valley's navigable channels, providing flood control, overseeing certain recreation facilities, and generating general business development. The nonpower programs also serve the Tennessee Valley through the general stewardship of land, water, and wildlife resources. Benefits attributable to these efforts include a potable water supply, water-pollution prevention, aquatic-habitat protection, forest management, and shoreline protection. TVA's nonpower programs also conduct certain research and development activities in pollution prevention and remediation.

Funding for the nonpower programs is primarily provided through federal appropriations. During 1995 and 1994, the nonpower programs received appropriations of \$139 million and \$140 million respectively. Certain nonpower-program activities are also funded by user fees and outside service revenues.

During 1995, the nonpower programs had net expense of \$182 million, which included a \$69 million charge for the write-off of the Columbia Dam and Reservoir project. The Columbia Dam and Reservoir, a multipurpose project financed by congressional appropriations, was suspended in prior years due to budget restrictions and environmental concerns. During 1995, TVA determined that the Columbia Dam would not be completed, and accordingly the project was written off.

Completed plant—Nonpower programs

Completed plant stated at gross consists of the following at September 30:

	1995			1994		
	Cost	Accumulated depreciation	Net	Cost	Accumulated depreciation	Net
Nonpower programs						
Hydro dams	\$ 914	\$ 232	\$ 682	\$ 913	\$ 221	\$ 692
Other	162	58	104	232	56	176
Total nonpower	\$1,076	\$290	\$786	\$1,145	\$277	\$868

Appropriation investment—Nonpower programs

Changes in the appropriation investment during the fiscal years ended September 30 were:

	1995	1994	1993
Nonpower programs			
Congressional appropriations	\$ 4,086	\$ 3,947	\$ 3,806
Transfers of property from other federal agencies	41	41	41
Repayments to general fund of the U.S. Treasury	(42)	(42)	(42)
Net appropriation investment	\$4,085	\$3,946	\$3,805

Report of Independent Accountants

To the Board of Directors of the Tennessee Valley Authority

We have audited the accompanying balance sheets (power program and all programs) of the Tennessee Valley Authority as of September 30, 1995 and 1994, and the related statements of income and retained earnings (power program), net expense and accumulated net expense (nonpower programs) and cash flows (power program and all programs) for each of the three years in the period ended September 30, 1995. These financial statements are the responsibility of the Tennessee Valley Authority's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards and *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in note 2 to the financial statements, the Tennessee Valley Authority has announced that it will not, by itself, complete certain deferred projects as nuclear units. Consideration is being given

to converting these units to another fuel source or entering into arrangements with third parties to complete as nuclear units.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the power program and all programs of the Tennessee Valley Authority as of September 30, 1995 and 1994, and the results of operations of the power program and nonpower programs and cash flows of the power program and all programs for each of the three years in the period ended September 30, 1995, in conformity with generally accepted accounting principles.

As discussed in note 9 to the financial statements, in 1995 the Tennessee Valley Authority adopted Statement of Financial Accounting Standard No. 112, "Employers Accounting for Postemployment Benefits."

In accordance with *Government Auditing Standards*, we have also issued a report dated November 16, 1995, on our consideration of the Tennessee Valley Authority's internal control structure and a report dated November 16, 1995, on its compliance with laws and regulations.

Coopers & Lybrand L.L.P.

Coopers & Lybrand L.L.P.
Knoxville, Tennessee
November 16, 1995

Report of Management

Management is responsible for the preparation, integrity, and objectivity of the financial statements of the Tennessee Valley Authority as well as all other information contained in the annual report. The financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis and, in some cases, reflect amounts based on the best estimates and judgments of management, giving due consideration to materiality. Financial information contained in the annual report is consistent with that in the financial statements.

The Tennessee Valley Authority maintains an adequate system of internal controls to provide reasonable assurance that transactions are executed in accordance with management's authorization, that financial statements are prepared in accordance with generally accepted accounting principles, and that the assets of the corporation are properly safeguarded. The system of internal controls is documented, evaluated, and tested on a continuing basis. No internal control system can provide absolute assurance that errors and irregularities will not occur due to the inherent limitations of the effectiveness of internal controls; however, management strives to maintain a

balance, recognizing that the cost of such a system should not exceed the benefits derived. No material internal control weaknesses have been reported to management.

Coopers & Lybrand was engaged to audit the financial statements of the Tennessee Valley Authority and issue reports thereon. Their audits were conducted in accordance with generally accepted auditing standards. Such standards require a review of internal controls, examination of selected transactions and other procedures sufficient to provide reasonable assurance that the financial statements neither are misleading nor contain material errors. The Report of Independent Accountants does not limit the responsibility of management for information contained in the financial statements and elsewhere in the annual report.

David N. Smith

David N. Smith
Chief Financial Officer

Statistical and Financial Summaries

For the years ended September 30

	1995	1994	1993	1992	1991
Sales (millions of kilowatt-hours)					
Municipalities and cooperatives	110,245	108,073	105,566	98,505	97,299
Federal agencies	7,226	4,407	2,382	2,204	2,148
Industries directly served	16,684	15,792	16,196	16,576	17,422
Electric utilities	—	—	—	—	48
Total sales	134,155	128,272	124,144	117,285	116,917
Operating revenues (millions of dollars)					
Electric					
Municipalities and cooperatives	\$ 4,654	\$ 4,582	\$ 4,479	\$ 4,266	\$ 4,272
Federal agencies	179	296	254	255	257
Industries directly served	460	452	472	472	531
Electric utilities	—	—	—	1	8
Other	82	71	71	71	68
Total revenues	\$5,375	\$5,401	\$5,276	\$5,065	\$5,136
Revenue per kilowatt-hour (mills)^a	39.4	40.3	40.6	41.2	42.0
Winter net dependable generating capacity (megawatts)					
Hydro ^b	5,225	5,242	4,885	4,885	4,885
Coal	15,032	15,032	15,088	15,088	15,088
Nuclear units in service	3,342	3,342	3,365	3,361	3,361
Combustion turbine	2,232	2,264	2,284	2,284	2,284
Total capacity	25,831	25,880	25,622	25,618	25,618
System peak load (megawatts)—summer	25,496	23,398	23,878	21,980	22,081
System peak load (megawatts)—winter	24,676	24,723	21,666	21,974	20,752
Percent gross generation					
Coal	71%	72%	77%	70%	70%
Hydro	12%	14%	13%	12%	14%
Nuclear	17%	14%	10%	18%	16%
Fuel cost per kilowatt-hour (mills)					
Coal	12.6	13.4	12.7	13.3	13.5
Nuclear ^c	6.1	11.0	10.9	11.0	10.2
Aggregate fuel cost per kwh net thermal generation	11.4	13.1	12.5	12.9	12.9
Fuel data					
Net thermal generation (millions of kilowatt-hours)	118,097	110,643	109,968	105,577	98,153
Billion Btu	1,197,295	1,120,868	1,105,395	1,069,725	998,934
Fuel expense (millions of dollars)	1,348	1,450	1,375	1,360	1,263
Cost per million Btu (cents)	112.61	129.40	124.42	127.16	126.48
Net heat rate, fossil only	10,138	10,131	10,052	10,132	10,177

a Excludes Department of Energy settlement payment of \$160 million for the years 1991-1994.

b Includes 405 megawatts of dependable capacity from the Corps of Engineers projects on the Cumberland River System.

c TVA changed its method of expensing the interest component of nuclear fuel expense in 1995 (see note 1).

Craven Crowell, Chairman
Johnny H. Hayes, Director
William H. Kennoy, Director

Board of Directors

Edward S. Christenbury
Senior Vice President
and General Counsel

Executive Committee

Joseph W. Dickey
Chief Operating Officer

Oliver D. Kingsley Jr.
President, TVA Nuclear, and
Chief Nuclear Officer

David N. Smith
Chief Financial Officer

Norman A. Zigrossi
Chief Administrative Officer

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TVA is an equal opportunity and affirmative action employer. TVA also ensures that the benefits of programs receiving TVA financial assistance are available to all eligible persons, regardless of race, color, sex, national origin, religion, disability, or age. This document can be made available in an alternative format upon request.

